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Please find below and/or attached an Office communication concerning this application or proceeding.

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/680,703
Filing Date: October 07, 2003
Appellant(s): MORELLI ET AL.

Amy J. Hoffman
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed February 9, 2010 appealing from the Office action mailed October 1, 2009.

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 1-16, 18-28 and 31-48 are pending. Claims 20-22 and 38-48 are withdrawn from consideration. Claims 1-16, 18, 19, 23-28 and 31-37 are rejected.

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

(8) Evidence Relied Upon

5,380,518	Roozdar	1-1995
6,524,624	Morelli et al.	2-2003
6,071,483	Pastore	6-2000
6,379.685	Richter et al.	4-2002

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-16, 18, 19, 23-28 and 31-37 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

In particular, "wherein the system is substantially free of nonoxidizable colorants" (present claim 1) is a concept that was not present in the specification as originally filed. Appellants are advised that the issue here is not whether particular instances of oxidizable colorants are present in the invention, but rather whether the concept of a system that is "substantially free of nonoxidizable colorants" was present in the specification as originally filed. The Examiner contends that this concept was not present in the specification as originally filed.

The specification as originally filed contains the following disclosures concerning oxidizable colorants:

> (i) "the *optional oxidizable colorant* of the second part is a colorant that undergoes color loss upon contact with the acidified chlorite disinfectants. Such colorants are typically soluble in vehicles that may be used as carriers for the second part, including (but not limited to) water, alcohol, glycerin and/or oil. In the practice of this invention, either a single oxidizable colorant, or a mixture of two or *more oxidizable colorants*, may be present in the second part. The amount of *oxidizable colorant* present in the second part is an amount that, upon combination with the first part, will impart the desired color and/or color intensity to the disinfecting composition. (page 7, 2nd paragraph);
>
> (ii) "...In addition, *oxidizable colorants* also include naturally occurring colorants such as red cabbage extract, beet root extract, carminic acid, curcumin, beta

> carotene, annatto extract, grape skin extract, astaxanthin, canthaxanthin, henna, guaiazulene, and mixtures thereof. *Oxidizable colorants* of this invention also include any combination of two or more of the above FD&C, D&C, Ext. D&C, and naturally occurring colorants. Furthermore, the *oxidizable colorant* may, upon contact with the first part, undergo a change in color." (page 7, line 28 to page 8, line 5);

The above disclosures, however, do not provide adequate support for the concept that the "system is substantially free of nonoxidizable colorants".

Written Description

An Appellant shows possession of the claimed invention by describing the claimed invention with all of its limitations using such descriptive means as words, structures, figures, diagrams and formula that fully set forth the claimed invention. *Lockwood v. American Airlines, Inc.*, 41 USPQ2d 1961, 1966 (Fed. Cir. 1997).

Appellant may use functional language, alternative expressions, negative limitations, or any style of expression or format of claim which makes clear the boundaries of the subject matter for which protection is sought. Any negative limitation or exclusionary proviso must have basis in the original disclosure. If alternative elements are positively recited in the specification, they may be explicitly excluded in the claims. See In re Johnson, 558 F.2d 1008, 1019, 194 USPQ 187, 196 (CCPA 1977) ("[the] specification, having described the whole, necessarily described the part remaining."). See also Ex parte Grasselli, 231 USPQ 393 (Bd. App. 1983), aff 'd mem., 738 F.2d 453 (Fed. Cir. 1984). The mere absence of a positive recitation is not basis for an exclusion. There is no recitation in the instant specification of a nonoxidizable colorant.

Considering the teachings provided in the specification as originally filed, the Examiner finds that Appellants have failed to provide the necessary teachings, by describing the claimed invention with all of its limitations using such descriptive means as words, structures, figures, diagrams and formula that fully set for the claimed invention, in such a way as to reasonably convey to one skilled in the relevant art that Appellants had possession of the concept of a system that is “substantially free of nonoxidizable colorants”.

Claim Rejections - 35 USC § 103

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Appellant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-6, 10-13, 18, 19, 26-28, 31-34 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roozdar U.S. Patent No. 5,380,518 A and Morelli et al. U.S. Patent No. 6,524,624 B1.

Roozdar teaches a two part disinfecting system comprising a first and second part to be mixed prior to use comprising a soluble chlorite salt in the first part (see abstract) such as sodium and potassium chlorite (column 3, lines 29-35; column 7, lines 35-41) and an acidic part comprising, inter alia, lactic acid, and sulfamic acid and mixtures thereof (column 7, lines 42-63; claim 2). The pKa of the acid is about 2.1 which is within the instantly claimed range of 2-5 (column 3, lines 46-49). The final pH of the disinfecting system when combined is below 5 and preferably less than about 1.8 (column 6, lines 33-35; column 10, lines 11-15). Roozdar discloses a 1:1 ratio of a combination of the two part formula in the form of a liquid (aqueous solution) (see example 5, column 13, lines 11-44). It is noted that sulfamic acid is present (column 3, line 40, column 7, line 55, column 9, line 12, column 10, line 22, claims 2 and 8), but it is not disclosed as being a “nitrogenous stabilizer. Further, although not explicitly stated, sulfamic acid is a primary amine. “Products of identical chemical composition (i.e. sulfamic acid) can not have mutually exclusive properties.” A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties Appellant discloses and/or claims (i.e. nitrogenous stabilization) are necessarily present. In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed.

Cir. 1990). Regarding the Reduced Chlorite Demand Factor of 2 or greater, 3 or greater and 4 or greater, and the aspect of instant claim 1 drawn to a system that minimizes the production of chlorine dioxide formation as compared to if the nitrogenous stabilizer were absent, as noted in *In re Best* (195 USPQ 430 (CCPA 1977)), and *In re Fitzgerald* (205 USPQ 594 (CCPA 1980)), the mere recitation of newly-discovered function or property, inherently possessed by things in prior art, does not cause claims drawn to those things to distinguish over prior art. In such a situation, the burden is shifted to the Appellant to prove that subject matter shown to be in prior art does not possess characteristic relied on where it has reason to believe that functional limitation asserted to be critical for establishing novelty in claimed subject matter may be inherent characteristic of prior art; whether rejection is based on "inherency" under 35 U.S.C. 102, on "prima facie obviousness" under 35 U.S.C. 103, jointly or alternatively, burden of proof is same.

Roozdar does not teach an oxidizable colorant present in the first part, the second part or both the first and second parts.

Morelli et al. teach a two-part disinfecting system that when mixed, yields a disinfecting composition wherein oxidizable colorants are added (column 2, lines 20-25). It is further disclosed that color is desirable in the disinfecting composition because it allows the user to visually confirm that the disinfectant has been properly applied. The optional colorant is in the first part or the second part or both (see claim 1) and is, for example FD&C Red #40 or FD&C Blue #1 dye indicating that it is a food drug and cosmetic colorant (column 3, lines 6-9). It would have been made obvious to one of ordinary skill in art at the time it was made to employ an oxidizable colorant in a two part disinfecting system motivated by the teaching of Roozdar who teaches a two part disinfecting system comprising a first and second part to be mixed prior to use comprising a soluble chlorite salt in the first part (see abstract) such as sodium and potassium chlorite (column 3, lines 29-35; column 7, lines 35-41) and an acidic part comprising, inter alia, lactic acid, and sulfamic acid and mixtures thereof (column 7, lines 42-63; claim 2). The pKa of the acid is about 2.1 which is within the instantly claimed range of 2-5 (column 3, lines 46-49) and a final pH of the disinfecting system when combined is below 5 and preferably less than about 1.8 (column 6, lines 33-35; column 10, lines 11-15). Further, Roozdar discloses a 1:1 ratio of a combination of the two part formula in the form of a liquid (aqueous solution) (see example 5, column 13, lines 11-44) and by the teaching of Morelli et al. that oxidizable color is desirable to confirm the presence of the disinfectant agent.

Claims 1-6, 10-13, 31-35 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pastore U.S. Patent No. 6,071,483 A. and Morelli et al. U.S. Patent No. 6,524,624 B1.

Pastore teaches a chlorine dioxide solution that is made with a two-chambered vessel (column 6, line 39 to column 7, line 15) with a chlorite such as sodium chlorite and potassium chlorite, with sodium chlorite being particularly preferred (column 4, lines 48-57). Disclosed is an organic acid such as lactic acid and inorganic acid such as sulfamic acid and mixtures thereof (column 4, line 61 to column 5, line 8). These agents are disclosed to be in aqueous solution (see examples 1-8). It is noted that sulfamic acid is present, but it is not disclosed as being a “nitrogenous stabilizer. Further, although not explicitly stated, sulfamic acid is a primary amine. “Products of identical chemical composition (i.e. sulfamic acid) can not have mutually exclusive properties.” A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties Appellant discloses and/or claims (i.e. nitrogenous stabilization) are necessarily present. In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Regarding the Reduced Chlorite Demand Factor of 2 or greater, 3 or greater and 4 or greater and the aspect of instant claim 1 drawn to a system that minimizes the production of chlorine dioxide formation as compared to if the nitrogenous stabilizer were absent, as noted in In re Best (195 USPQ 430 (CCPA 1977)), and In re Fitzgerald (205 USPQ 594 (CCPA 1980)), the mere recitation of newly-discovered function or property, inherently possessed by things in prior art, does not cause claims drawn to those things to distinguish over prior art. In such a situation, the burden is shifted to the Appellant to prove that subject matter shown to be in prior art does not possess characteristic relied on where it has reason to believe that functional limitation asserted to be critical for establishing novelty in claimed subject matter may be inherent characteristic of prior art; whether rejection is based on "inherency" under 35 U.S.C. 102, on "prima facie obviousness" under 35 U.S.C. 103, jointly or alternatively, burden of proof is same.

Pastore does not teach the oxidizable colorant, present in the first part, the second part or both the first and second parts.

Morelli et al. teach a two-part disinfecting system that when mixed, yields a disinfecting composition wherein oxidizable colorants are added (column 2, lines 20-25). It is further disclosed that color is desirable in the disinfecting composition because it allows the user to visually confirm that the disinfectant has been properly applied. The optional colorant is in the first part or the second part (see claim 1) and is, for example, FD&C Red #40 or FD&C Blue #1 dye indicating that it is a food drug and cosmetic colorant (column 3, lines 6-9). It would have been made obvious to one of ordinary skill in art at the time it was made to employ a color in the two part disinfecting system of Pastore motivated by the teaching of Morelli et al. that color is desirable to confirm the presence of the disinfectant agent.

Claims 1-16, 18, 19, 23-28 and 31-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richter et al. U.S. Patent No. 6,379,685 B1.

Richter et al. teach an admixture comprised of two cooperative parts, the first part of major or equal proportion having an aqueous mixture of an acid and the second part of equal or minor proportion of an alkali metal chlorite wherein they are mixed for an immediate application as soon as needed (column 7, line 64 to column 8, line 50). Preferred acids include organic and inorganic acids such as lactic acid, sulfonic acids and mixtures thereof (column 9, line 64 to column 10, line 6). Preferred chlorine release compounds are alkaline earth chlorinated derivatives, such as sodium chlorite (column 6, lines 21-29). It is noted that sulfamic acid is present, but it is not disclosed as being a “nitrogenous stabilizer. Further, although not explicitly stated, sulfamic acid is a primary amine. “Products of identical chemical composition (i.e. sulfamic acid) can not have mutually exclusive properties.” A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties Appellant discloses and/or claims (i.e. nitrogenous stabilization) are necessarily present. In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Regarding the Reduced Chlorite Demand Factor of 2 or greater, 3 or greater and 4 or greater and the aspect of instant claim 1 drawn to the a system that minimizes the production of chlorine dioxide formation as compared to if the nitrogenous stabilizer were absent, as noted in *In re Best* (195 USPQ 430 (CCPA 1977)), and In re Fitzgerald (205 USPQ 594 (CCPA 1980)), the mere recitation of newly-discovered function or property, inherently possessed by things in prior art, does not cause claims drawn to those things to distinguish over prior art. In such a situation, the burden is shifted to the Appellant to prove that subject matter shown to be in prior art does not possess characteristic relied on where it has reason to believe that functional limitation asserted to be critical for establishing novelty in claimed subject matter may be inherent characteristic of prior art; whether rejection is based on "inherency" under 35 U.S.C. 102, on "prima facie obviousness" under 35 U.S.C. 103, jointly or alternatively, burden of proof is same.

Richter et al. disclose that a pH of greater than 5 is unacceptable because it reduces the effeciency of the composition and a pH of less than 1 is unacceptable because it can result in substantial irritation (column 9, lines 50-63; column 12, lines 61-63).

It does not teach that the acid portion has a pKa of 2-5. Regarding Appellant's allegation that the pKa makes the composition different, the pKa of a compound is related to the pH of the solution when it is at equilibrium between its acid and base forms. In more depth, the pH is the negative logarithm of the hydrogen ion concentration in a solution (a reflection of the acidity of the solution - the more hydrogen ions, the more acidic the solution, and the lower the pH). Hence, if the pH is the same, and the acid/acid salt employed is the same, then the pKa would be the same. As noted in *In re Best (*195 USPQ 430 (CCPA 1977)), and *In re Fitzgerald* (205 USPQ 594 (CCPA 1980)), the mere recitation of newly discovered function or property, inherently possessed by things in prior art, does not cause claims drawn to those things to distinguish over prior art. In such a situation, the burden is shifted to the Appellant to prove that subject matter shown to be in prior art does not possess characteristic relied on where it has reason to believe that functional limitation asserted to be critical for establishing novelty in claimed subject matter may be inherent characteristic of prior art; whether rejection is based on "inherency" under 35 U.S.C. 102, on "prima facie obviousness" under 35 U.S.C. 103, jointly or alternatively, burden of proof is same. The optional addition of a chromophore, dye or pigment (oxidizible colorant) is disclosed (see column 9, lines 12-21; Examples III-V, and X-XIV). See, inter alia, example IV, column 20, wherein the FD&C dye (food drug and cosmetic) (green #3) is in the second part (acidic portion). As noted above the two portions are mixed in equal parts (column 7, line 64 to column 8, line 60). A solid formulation is contemplated in column 8, line 21.

Further thickening and film forming agents are disclosed throughout, such as column 11, line 16 to column 12, line 34.

Richter's preferred acids include organic and inorganic acids such as lactic acid, sulfonic acids and mixtures thereof (column 9, line 64 to column 10, line 6). Preferred chlorine release compounds are alkaline earth chlorinated derivatives, such as sodium chlorite (column 6, lines 21-29). The claimed concentration of the nitrogenous stabilizer (sulfamic acid) when the first and second parts are combined is 0.001% to about 20% by weight. Richter et al. does not teach a specific amount of "nitrogenous stabilizer", however the presence of sulfamic acid is disclosed. Ranges of the amount of acidulant and/or antimicrobial are disclosed as from 1%-12 wt % (column 17, lines 55-60) which is encompassed the claimed amounts of from .001% to about 20%. One skilled in the art would have been motivated to prepare additional useful compositions of the ranges taught by the prior art. While the reference is silent regarding some % ratios, the difference in concentration will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration is critical. When the general conditions are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller*, 220 F.2d 45, 105 USPQ 233, 235 (CCPA 1955). In the absence of any criticality and/or unexpected results of the additional ranges claimed, the instant invention is considered obvious. Regarding the amount of chlorite present when combined with the second part, the reference is silent in this aspect, but discloses the amounts of the acid/chlorite combined (acidulant and/or antimicrobial) as 1-12% or 1-8% preferred (column 17, lines

55-66). These amounts partially overlap and encompass the claimed amount of 0.005% to about 3%. One skilled in the art would have been motivated to prepare additional useful compositions of the ranges taught by the prior art. While the reference is silent regarding some % ratios, the difference in concentration will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration is critical. When the general conditions are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. In re Aller, 220 F.2d 45, 105 USPQ 233, 235 (CCPA 1955). In the absence of any criticality and/or unexpected results of the additional ranges claimed, the instant invention is considered obvious. Regarding the amount of acid present in the second part such that, when combined with the first part, it is present in a concentration of 0.1 % to about 10 % by weight, Richter et al. does not teach the combined percentage specifically however, the ranges of the amount of acidulant and/or antimicrobial are disclosed as from 1%-12 wt % (column 17, lines 55-66). This partially overlaps the claimed range. One skilled in the art would have been motivated to prepare additional useful compositions of the ranges taught by the prior art. While the reference is silent regarding some % ratios, the difference in concentration will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration is critical. When the general conditions are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller*, 220 F.2d 45, 105 USPQ 233, 235 (CCPA 1955).

In the absence of any criticality and/or unexpected results of the additional ranges claimed, the instant invention is considered obvious.

(10) Response to Argument

Claims 1-16, 18, 19, 23-28 and 31-37 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

Appellant states that the claims were improperly rejected. Appellant states that by reciting oxidizable colorants one could not include nonoxidizable colorant because it would obscure or hide any fading or instability of the oxidizable colorants in the examples. Appellant states that the specification clearly conveyed the exclusion of non-oxidizable colorants. In response, nowhere in the instant specification is the specific concept of the substantial inclusion or exclusion of non-oxidizable colorants set forth. The instant specification teaches that colorants in general are added to the composition to visually confirm the application of the composition to large herds when multiple farm workers are applying the disinfectant to many different animals (see specification page 2). It further teaches that when a colorant is present, it is degraded (e.g. oxidized) in significant part by the chlorine dioxide generated within the disinfectant and the presence of the nitrogenous stabilizer by controlling chlorine dioxide generation, imparts extended color longevity to the disinfecting composition by limiting oxidation of the colorant (specification, page 5, first paragraph). Thus Appellant has support for an oxidizable colorant that maintains its color by virtue of the nitrogenous stabilizer, however there is no support for **exclusion of a non-oxidizable colorant** because it is not specifically recited and further, one of ordinary skill in the art would not have contemplated its exclusion merely because the instant specification demonstrates maintaining color by virtue of the nitrogenous stabilizer. Further, the argument that addition of non-oxidizable colorant would obscure or hide any fading or instability of the oxidizable colorant is directed more to an intended use of the composition as a subject of study rather than as a disinfectant system as claimed. The examples referred to by appellant in which no non-oxidizable colorant was present were directed to tests for measuring the activity of the nitrogenous stabilizer and not to the generic inclusion of and function of colorants in a disinfecting system. Exemplary tests designed to test a parameter of the claimed system cannot be interpreted as defining or limiting the contents of the contemplated disinfection system.

Appellant states that because the application fails to positively recite nonoxidizable colorants, evidence is provided for the exclusion of the same. In response, the MPEP at 2173.05(i) states “Any negative limitation or exclusionary proviso must have basis in the original disclosure. If alternative elements are positively recited in the specification, they may be explicitly excluded in the claims. See In re Johnson, 558 F.2d 1008, 1019, 194 USPQ 187, 196 (CCPA 1977) ("[the] specification, having described the whole, necessarily described the part remaining."). See also Ex parte Grasselli, 231 USPQ 393 (Bd. App. 1983), aff'd mem., 738 F.2d 453 (Fed. Cir. 1984). **The mere absence of a positive recitation is not basis for exclusion**. Any claim containing a negative limitation which does not have basis in the original disclosure should be rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Note that a lack of literal basis in the specification for a negative limitation may not be sufficient to establish a prima facie case for lack of descriptive support. Ex parte Parks, 30 USPQ2d 1234, 1236 (Bd. Pat. App. & Inter. 1993). See MPEP § 2163 - § 2163.07(b) for a discussion of the written description requirement of 35 U.S.C. 112, first paragraph." Not reciting "non-oxidizable colorants" in the examples in the instant specification does not entitle Appellant to exclusion of non-oxidizable colorant in the claims. Further, Appellant has defined oxidizable colorants so broadly in the instant specification, to include "colorants that undergo color loss upon contact with the acidified chlorite disinfectants (page 7, lines 9-12) "naturally occurring colorants, such as red cabbage extract, beet root extract, carminic acid, curcumin, beta carotene, annatto extract, grape skin extract, astaxanthin, canthaxanthin, henna, guaiazulene, and mixtures thereof and further and include FD&C, D&C, Ext. D&C and naturally occurring colorants. Appellant has specifically described what is meant by oxidizable colorants, but has provided no notation, description or list of any non-oxidizable colorants that are contemplated to be excluded. It is well established that the specification teaches an invention, whereas the claims define the **right to exclude**. *SRI Int'l v. Matsushita Elec. Corp. of Am.*, 775 F.2d 1107, 1121 [227 USPQ 577] n.14 (Fed. Cir. 1985), however, non-oxidizable colorants are not taught or described in the specification or claims as originally filed, thus the metes and bounds of the term are not clear, making it impossible to ascertain with reasonable precision when that term is infringed and when it is not and failing to put one in possession of what precisely the composition is to be substantially free of.

Claims 1-6, 10-13, 18, 19, 26-28, 31-34 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roozdar U.S. Patent No. 5,380,518 A and Morelli et al. U.S. Patent No. 6,524,624 B1.

Regarding the rejection under 35 USC 103 over Roozdar and Morelli, Appellant states that Roozdar teaches away from the objective of Morelli and states that it is improper to combine references where the references teach away from their combination. In response to Appellant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In this case, Roozdar teaches the two part disinfecting system lacking only the oxidizable colorant. It would have been made obvious to one of ordinary skill in art at the time it was made to employ an oxidizable colorant in a two part disinfecting system motivated by the teaching of Roozdar who teaches a two part disinfecting system comprising a first and second part to be mixed prior to use comprising a soluble chlorite salt in the first part (see abstract) such as sodium and potassium chlorite (column 3, lines 29-35; column 7, lines 35-41) and an acidic part comprising, inter alia, lactic acid, and sulfamic acid and mixtures thereof (column 7, lines 42-63; claim 2). The pKa of the acid is about 2.1 which is within the instantly claimed range of 2-5 (column 3, lines 46-49) and a final pH of the disinfecting system when combined is below 5 and preferably less than about 1.8 (column 6, lines 33-35; column 10, lines 11-15). Further, Roozdar discloses a 1:1 ratio of a combination of the two part formula in the form of a liquid (aqueous solution) (see example 5, column 13, lines 11-44) and by the teaching of Morelli et al. that oxidizable color is desirable to confirm the presence of the disinfectant agent. Appellant attempts to distance the instant invention from the invention of Roozdar combined with Morelli by stating that the composition is aimed at minimizing the generation of chlorine dioxide. In response to Appellant's argument that Roozdar does not teach minimizing the generation of chlorine dioxide, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Further, with regard to the disputed limitation of instant claim 1, the claim is not drawn to minimizing the production of chlorine dioxide per se. rather; the claim recites "wherein the system minimizes the production of chlorine dioxide formation **as compared to if the nitrogenous stabilizer were absent**.” Although Roozdar does not explicitly state that the system minimizes the production of chlorine dioxide formation as compared to if the nitrogenous stabilizer were absent; it is noted that the nitrogenous stabilizer **is present** (column 3, line 40, column 7, line 55, column 9, line 12, column 10, line 22, claims 2 and 8), thus the composition of Roozdar would function in the same manner, to minimize the production of chlorine dioxide.

Claims 1-6, 10-13, 31-35 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pastore U.S. Patent No. 6,071,483 A. and Morelli et al. U.S. Patent No. 6,524,624 B1.

Regarding the rejection under 35 USC 103 over Pastore and Morelli, Appellant states that Roozdar teaches away from the objective of Morelli and states that it is improper to combine references where the references teach away from their combination. In response to Appellant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In response to Appellant's argument that Pastore does not teach minimizing the generation of chlorine dioxide, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Further, with regard to the disputed limitation of instant claim 1, the claim is not drawn to minimizing the production of chlorine dioxide per se. rather; the claim recites "wherein the system minimizes the production of chlorine dioxide formation **as compared to if the nitrogenous stabilizer were absent**." Although Pastore does not explicitly state that the system minimizes the production of chlorine dioxide formation as compared to if the nitrogenous stabilizer were absent; it is noted that the nitrogenous stabilizer **is**

present (see claim 7) thus the composition of Pastore would function in the same manner, to minimize the production of chlorine dioxide.

Claims 1-16, 18, 19, 23-28 and 31-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richter et al. U.S. Patent No. 6,379,685 B1.

Appellant states that the rejection of Richter has been overcome because Appellants' claims state that the composition is substantially free of nonoxidizable (fading) colorants. In response, Richter et al. teach the presence of a chromophor or colorant and has examples comprising pigments, colorants and/or dyes (see column 9, lines 12-21). In comparing the dyes of Richter et al. to the instant case, Richter et al. teach, for example, green dye #3 (see column 20, lines 19 and 61, column 21, line 39) which is included in the list of oxidizable colorants in the instant case (see instant specification, page 8, lines 2-4 and specifically, page 14, table 1). Additionally, Richter et al. does not describe or include any non-oxidizable colorants, thereby meeting the disputed recitation that the composition is substantially free of non-oxidizable colorant.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Donna Jagoe /D. J./

Conferees:

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/Daniel M Sullivan/

Supervisory Patent Examiner, Art Unit 1621